

Steele, within four miles of this city ; *B. dissectum* Spreng. is frequent in rich woodlands ; *B. obliquum* Muhl., occurring in low damp woods, is not so common.

I am indebted to Messrs. R. V. Bailey and H. Hungerford for the photograph of *B. virginianum*.

WASHINGTON, D. C.,

May 29, 1905.

## SOME LARGE SPECIMENS OF SMALL TREES IN GEORGIA

BY ROLAND M. HARPER

Two winters ago while collecting timber specimens in Georgia I came across some unusually large examples of four species which are ordinarily shrubs. The following notes on them may be of interest.

### RHUS COPALLINA L.

About two years ago \* I reported the occurrence of arborescent specimens of this on the banks of the Chattahoochee River in Early County near Saffold, at or near the inland edge of the Lower Oligocene region of the coastal plain. In February, 1904, I revisited the spot and found more of them (the fact that there are almost no evergreens on alluvial banks in that part of the country making it easier to see the trees in winter). The trunk of the largest specimen observed was eleven inches in diameter near the base, but as it forked about three feet from the ground (see Fig. 1) I had to select a smaller one for the collection. The largest specimens averaged about thirty feet tall. †

On March 26 I saw along the bluff of McBean Creek in the southeastern corner of Richmond County a specimen of *R. copallina* which I estimated to be forty feet tall. Its trunk was only six inches in diameter.

\* Bull. Torrey Club 30 : 291. 1903.

† I looked in vain for the large specimens of *Aralia spinosa* which I had seen near the same place in 1901, and was afterward informed that the demand for the bark ("prickly-ash bark") as an ingredient of some patent medicine had caused their destruction between my two visits.

## RHUS GLABRA L.

This does not seem to be classed as a tree in any of the books. In December, 1903, I frequently found specimens over three inches in diameter and twenty feet tall growing on the Cambrian shales along the Oostanaula and other streams in Gordon County, and on January 5, 1904, I found on the same formation, in a cane-brake on the bank of the Coosa River, in Floyd County, about twelve miles below Rome, veritable little grove of this species, in which many of the specimens were as much as seven inches in diameter and thirty feet tall, with the lowest branches higher up than I could reach. These trees seemed perfectly sound and healthy, and I cut a log from one of them which astonished even the natives who saw me wrapping it up for shipment.

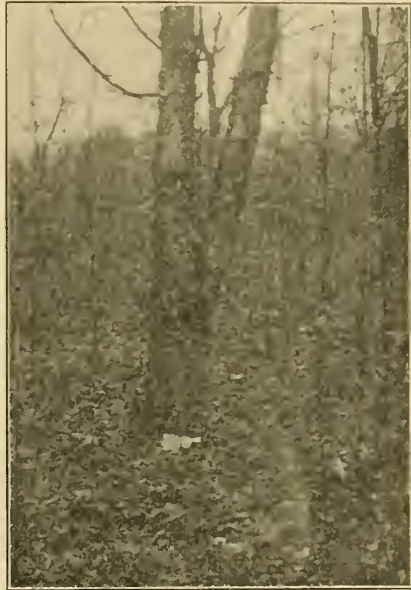


FIG. 1. Trunk of *Rhus copallina*, 11 inches in diameter. Early County, February, 1904.

This species is readily distinguished from *R. copallina* in winter by several characters which are rarely if ever mentioned in descriptions. These characters may be contrasted as follows :

| <i>R. glabra</i>  | <i>R. copallina</i>   |
|---|---|
| Heart-wood deep yellow, sharply distinguished from the narrow white sap-wood. | Heart-wood pale greenish-yellow, not sharply distinguished from the sap-wood. |
| Fruiting panicles erect.  | Fruiting panicles drooping.   |
| Drupes bright scarlet.  | Drupes dull dark-red.   |

There are also some differences in the bark, almost impossible to describe.

The natives in northwest Georgia commonly call *R. glabra* "red sumac" and *R. copallina* "black sumac," doubtless on account of the difference in color of the fruit.

#### ILEX MYRTIFOLIA Walt.

In the swamp of the Suwannee River (rather an unusual habitat for it) in Clinch County I noticed in February, 1904, some specimens of this handsome little tree about thirty feet tall, with trunks a foot in diameter, though this species has not hitherto been recognized as a member of our sylvia. During the same winter and following spring I noticed other arborescent specimens of it, in pine-barren ponds, in Sumter, Berrien, Lowndes, Clinch, Ware, and other counties in the coastal plain.

A characteristic feature of this species is that its trunk is never strictly erect, but always ascending or curved.

#### STAPHYLEA TRIFOLIA L.

This too does not seem to have ever been credited with becoming a tree. On January 7, 1904, I found one specimen on the right bank of the Etowah River in Floyd County about four miles above Rome, on the Knox Dolomite (Lower Silurian) formation, which had a straight erect trunk five or six inches in diameter, with the lowest branches about six feet from the ground. There were a few shrubby specimens of it near by, but apparently no other arborescent one.

Specimens of these four little trees formed part of Georgia's exhibit at St. Louis last year, and are now presumably in the forestry collection in the state capitol in Atlanta.

COLLEGE POINT, NEW YORK.

## COTYLEDON- AND LEAF-STRUCTURE IN CERTAIN RANUNCULACEAE

BY NEATA CLARK

This paper covers a brief study of the leaves and cotyledons of four of the *Ranunculaceae*, viz.: *Aquilegia coerulea* James, *Anemone multifida* Poir., *Pulsatilla hirsutissima* (Pursh) Britton,